
FINDING AND RECOMMENDATION(S)

Submitted by: Conservation Community

Finding: *(i.e., Conclusions reached after investigation and/or evaluation of facts)*

There is a need for clear and consistent messaging regarding the appropriate ground cover options which meet defensible space needs without compromising water quality protections.

Background and Supporting Evidence: *(A short statement justifying the Finding and describing desired outcome(s); usually no more than half a page.)*

Prior to the Angora Fire, fire personnel and agencies, including the TRPA, and national fire-protection programs (e.g. Firewise Communities USA) agreed to a 5 foot radius (termed the "Fire Free Zone") around one's home where non-flammable materials, such as gravel and rocks, must extend. Available science had shown that with proper maintenance in ones yard, conducive with PRC 4291, using ground cover such as pine needles and wood chips (both within reason) beginning at the 5 foot radius and extending outward from one's home was sufficient and did not create increased fire danger. If fire were carried by the pine needle/wood chip layers, the flame length would at best be no more than a few inches in height, and thus in the absence of anything to carry the flame "up," it would simply extinguish itself once the layer came to an end (generally when it met with the layer of rock or other non-flammable materials extending to the 5 foot mark).

The requirements which have led to the use of pine needles and wood chips as ground cover within the first 30 feet around a home are part of TRPA's Best Management Practices (BMP) Program, which is based on reducing erosion from private property to aid in achieving water quality standards. Water researchers have learned that sediment, which is loosened through erosion on bare soil, has the largest impact on water clarity. The BMP program was established to require landscaping that prevents sediment (and nutrient) erosion from occurring on individual parcels. The objective is for a property to be "self-contained" where no sediment (or nutrients) flow away from that property (when they do, they eventually flow into Lake Tahoe and impact clarity). The TMDL model has only confirmed how important this program is in achieving water quality standards. While many options exist for ground cover in this 30 foot zone, pine needles and wood chips have served as a less expensive alternative for many homeowners.

Since the Angora Fire, there has been much discussion about the appropriateness of pine needles and wood chips as ground cover within the first 30 feet radius around a home. Although the science has not changed, pine needle and wood chip cover on improperly maintained properties (which do not meet PRC 4291 requirements), whether a result of property owner confusion, neglect, or absence, can pose a fire threat where surface and ladder fuels are present to allow a ground level fire to move upward. Within the months immediately following the Fire, discussions included suggestions moving the often locally termed "5 foot rock moat" out to perhaps 10 feet. However, more recently, there has been pressure to eliminate the requirement for ground cover altogether in the 30 foot zone.

As shown by the TRPA's Home Landscaping Guide, and discussed in great detail by the Defensible Space/BMP Working Group, there are multiple other options available to cover bare soil. Based on that information alone, there is simply no need to eliminate the requirements of the BMP program. However, as we bring homeowners into compliance with PRC 4291, we can expect that pine needles (when maintained as a "duff" layer) and wood chip layers, when maintained *properly*, will pose no threat because there would be no way for a ground level fire, with a flame length of mere inches, to advance into the crown, or to generate embers which would land on a home. Therefore, the utility of duff layers and wood chips (when maintained properly) to reduce erosion and reduce homeowner cost should not be dismissed.

If the current BMP ground cover requirements were removed, there could be over 40,000 lots in the Basin with a 30 foot radius of bare soil around their homes. This would result in the following:

1. The cumulative impacts of the erosion would further degrade lake clarity and affect water quality throughout the Basin. These impacts would also conflict with the Lake's ONRW designation, TRPA threshold standards, and the Lahontan Regional Control Board's TMDL goals.
2. To assist in mitigating the impacts of the bare soil, property owners may be burdened with very expensive requirements to install facilities on the borders of their property that capture the eroded sediment (assuming such facilities were proven to capture sediment in run-off, which is currently questionable).

Recommendation(s) *(Based upon an analysis of the Finding, the following recommendation(s) should be made to the Governors):*

1. **The Governors maintain the requirements (federal, state, and TRPA) which prohibit bare soil on parcels.**

- 2. The Governors support the current BMP Program and direct involved agencies to develop a combined approach to defensible space and BMP inspections.**

Impacts of Implementation: *(The implementation of any Recommendation is likely to have specific impacts. Consider potential consequences related to each of the following areas):*

Analysis of impacts on the following factors is REQUIRED (Best Estimate):

- ☐ Cost – Because this would maintain an existing program, no cost increases are expected.
- ☐ Funding source
- ☐ Staffing
- ☐ Existing regulations and/or laws – would be maintained.

Analysis of impacts on the following factors is OPTIONAL:

- ☐ Operational
- ☐ Social
- ☐ Political
- ☐ Policy
- ☐ Health and Safety
- ☐ Environmental
- ☐ Interagency